ORDINANCE 2021-TBD

AN ORDINANCE OF THE CITY COUNCIL OF ENCINITAS, ADOPTING AMENDMENTS TO CHAPTER 23.12 (UNIFORM CODES FOR CONSTRUCTION) OF TITLE 23 (BUILDING AND CONSTRUCTION) OF THE ENCINITAS MUNICIPAL CODE TO ADOPT THE 2019 CALIFORNIA BUILDING CODE AND CALIFORNIA GREEN BUILDING CODE WITH CERTAIN AMENDMENTS, ADDITIONS, AND DELETIONS RELATED TO ENERGY EFFICIENCYAND SOLAR ENERGY.

SECTION ONE. The City Council of the City of Encinitas hereby finds and declares as follows:

WHEREAS, the City of Encinitas desires to amend Section 23.12.080 and Section 23.12.110 of Chapter 23.12 (Uniform Codes for Construction) of Title 23 (Building and Construction) of the City of Encinitas Municipal Code to implement goals and objectives set forth in the Climate Action Plan for reducing greenhouse gas (GHG) emissions, conserving water and energy, encouraging green buildings, protecting the natural environment, and protecting the health of residents and visitors;

WHEREAS, the California Global Warming Solutions Act of 2006, known as AB 32, established a statewide goal of reducing greenhouse gas emission to 1990 levels by 2020 and to a level 80% below 1990 levels by 2050, and directs the California Air Resources Board to develop a strategy to achieve such reductions;

WHEREAS, the State of California Climate Strategy identifies key strategies for addressing climate change that includes increasing renewable energy usage, doubling energy efficiency savings in existing buildings, making heating fuels cleaner, and reducing emissions from transportation;

WHEREAS, the City Council of the City of Encinitas adopted CEQA-qualified Climate Action Plan on January 17, 2018 aligning local climate action policies with the State of California Climate Strategy including the adoption strategies and goals to procure grid available electricity from 100% renewable energy sources, increase energy efficiency in residential and non-residential buildings, and promote the installation of local renewable energy sources at homes and businesses;

WHEREAS, the City of Encinitas Climate Action Plan found that buildings are the second largest contributor to GHG emissions, accounting for 39 percent of its total emissions in 2012;

WHEREAS, the United Nations Intergovernmental Panel on Climate Change (IPCC) has warned that failure to address the causes of global climate change within the next few years will result in sea level rise, increased frequency of wildland fires, and reduced freshwater resources, which will significantly increase the cost of providing local governmental services and protecting public infrastructure;

WHEREAS, the 2019 California Building Standards Code adopted by the California Building Standards Commission has set minimum Green Building Standards and, within the code, expressly stated that the standards are viewed as "minimal" and that local government entities retain discretion, pursuant to Health and Safety Code Section 17958 to exceed the

standards established by the code based on express findings that such changes or modifications are reasonably necessary because of local climatic, topographical, or geological conditions pursuant to Health and Safety Code Section 17985.5, 17958.7, and 18941.5;

WHEREAS, California Green Building Standard Code Section 101.7.1 provides that local climatic, geological, or topographical conditions include environmental conditions established by a city, county, or city and county;

WHEREAS, the local amendments and changes to the California Building Standards Codes are reasonably necessary because of the following climatic, geologic, and topographical conditions:

- 1. The City has over 6 miles of beaches, several creeks, and other low-lying areas prone to flooding. The City is at risk to coastal storms, erosion, and flooding. There is broad scientific consensus that the earth will continue to warm and sea levels will rise impacting beaches, roads, properties, infrastructure, and environmentally sensitive areas.
- 2. The City has experienced increases in annual temperature. Annual temperatures have increased more than 1 degree F in many parts of the state, and exceeded increases of 2 degree F in areas that include the San Diego region. Temperature increases are expected to continue into the future.
- 3. The City is situated in hilly, inland terrain. Approximately 50% of the City is covered by native vegetation on steep and frequently inaccessible hillsides. The native vegetation includes highly combustible grasses, dense brush and chaparral, and could pose a wildfire risk. Natural firebreaks in these areas are significantly lacking.
- 4. The City experiences seasonal climatic conditions during the late summer and fall that can result in frequent Santa Ana weather patterns. Dry, hot, strong, and gusty Santa Ana winds conditions produce extreme dryness and some of the highest wind events in San Diego County, resulting in some of the region's most catastrophic wildfires. These fires impact public health in the populated coastal zone through extreme heat and smoke.
- 5. The City acts to address environmental conditions that impact public health and welfare. Sustainability and resiliency are core values of the City's General Plan and Climate Action Plan. Energy Efficiency promotes public health and welfare by enhancing the environmental and economic health of the City through green practices in design, construction, maintenance, and operation of new and existing buildings. Construction of energy efficient buildings and installation of renewable energy systems protects the public health and welfare by reducing air pollution, greenhouse gas emissions, average and peak energy demand, and adverse impacts from power outages.
- 6. Amendments to the California Green Building Standards Code and Energy Code are reasonably necessary to promote energy efficiency and conservation in the City, increase use of sustainable energy sources, reduce GHG emissions, promote green development patterns, and maintain a long-term balance between environmental, social, and economic impacts that protect public health and welfare.

WHEREAS, Public Resources Code Section 25402.1(h)(2) and Section 10-106 of the Building Energy Efficiency Standards establish a process by which local governments may adopt more stringent energy efficiency standards provided that the more stringent standards are cost effective and the California Energy Commission finds that the standards will require buildings to be designed to consume no more energy than permitted by the California Energy Code;

WHEREAS, the California Energy Codes & Standards 2019 Nonresidential New Construction Reach Code Cost Effectiveness Study prepared by the California Statewide Utility Program and TRC's Cost-Effectiveness Study for Nonresidential New Construction and Alterations for Solar Photovoltaics (PV) demonstrate that the local amendment are cost-effective and do not result in buildings consuming more energy than is permitted by the California Energy Code;

WHEREAS, the City Council finds in its independent judgment that the proposed amendment to the Encinitas Municipal Code to adopt State uniform codes is exempt from environmental review as per Section 15378(b)(5) of the CEQA Guidelines since the activity in question is not considered a "project" as defined therein. The action being considered by the City Council is an administrative activity of government that will not result in the direct or indirect physical change in the environment. This action entails adoption of State mandated Building Codes that are enforceable upon the City. Minor amendments will not have a significant effect on the environment because the strengthened requirements reduce hazards and accommodate features to reduced environmental effects. The City Council therefore finds that there is no possibility that the minor local amendments may have a significant effect on the environment; therefore pursuant to Section 15061(b)(3) of the CEQA Guidelines the activity is exempt from the provisions of CEQA; and

WHEREAS, the City Council of the City of Encinitas adopted Chapter 23.12 (Uniform Codes for Construction) of Title 23 (Building and Construction) of the Encinitas Municipal Code on October 23, 2019 and now seeks to amend Section 23.12.030, Section 23.12.080, and Section 23.12.110 of Chapter 23.12 to reflect its Climate Action Plan.

NOW, THEREFORE, the City Council of the City of Encinitas, California, hereby ordains as follows:

SECTION TWO. Sections 23.12.080 and 23.12.110 of Chapter 23.12 of the Encinitas Municipal Code are hereby amended by repealing in its entirety and adopting a new Section 23.12.080 and Section 23.12.110 to read as follows:

23.12.080 Adoption of the 2019 California Energy Code, Part 6, Title 24 of the California Code of Regulations.

A. There is adopted and incorporated by reference herein as the City's Energy Code for the purpose of prescribing regulations in the City of Encinitas for the conservation of energy, the 2019 California Energy Code, Part 6, Title 24 of the California Code of Regulations, a portion of the 2019 California Building Standards Code, as defined in the California Health and Safety Code, Section 18901 et seq. Except as otherwise provided by this section of the City of Encinitas Municipal Code, all construction of buildings where energy will be utilized shall be in conformance with 2019 California Energy Code and

any rules and regulations promulgated pursuant thereto, including the California Energy Code, 2019 Edition, published by the California Energy Commission.

B. Section 120.10 is added to the California Energy Code as follows:

Section 120.10 NONRESIDENTIAL PHOTOVOLTAIC SYSTEM REQUIRED

All new non-residential construction, high-rise residential, and hotel/motel buildings shall comply with the requirements of Section 120.10(a) or 120.10(b). Additions to existing non-residential, high-rise residential, and hotel/motel buildings where the total roof area is increased by at least 1,000 square feet shall comply with the requirements of Section 120.10(a) or (b). Alterations to existing non-residential, high-rise residential, and hotel/motel buildings with a permit valuation of at least \$1,000,000 that affects at least 75 percent of the gross floor area shall also comply with the requirements of Section 120.10(a) or (b).

The required installation of a photovoltaic (PV) system shall be sized according to one of the following methods:

(a) Based on Gross floor area.

1. Building with greater than or equal to 10,000 square feet of gross floor area shall install a minimum PV system sized at 15 kilowatts direct current (kWdc) per 10,000 square feet of gross floor area.

Note to Section 120.10(a)1: PV system size = 15 kWdc X (Gross Floor Area / 10,000 sq. ft.) where the building size factor shall be rounded to the nearest tenth and the resulting product shall be rounded to the nearest whole number. For example, an applicant with a 126,800 square foot building shall install a minimum 191 kilowatt (kWdc) PV system.

2. Buildings under 10,000 square feet of gross floor area shall install a minimum 5 kilowatt (kWdc) PV system.

Note to Section 120.10(a)2: Applicants are encouraged to right-size the PV system based on the building's electrical demand to improve the system's cost effectiveness. Applications should also ensure that the PV system meets electrical corporation net energy metering requirements, if applicable.

(b) **Based on Time Dependent Valuation (TDV).** Install a solar PV system that will offset 80 percent of the building's TDV energy on an annual basis. The system sizing requirement shall be based upon total building TDV energy use including both conditioned and unconditioned space and calculated using modeling software or other methods approved by the Development Services Director.

Exception 1 to Section 120.10: The Development Services Director or their designee may waive or reduce, by the maximum extent necessary, the provision of this Section if the Development Services Director or their designee determines there are sufficient practical challenges to make satisfaction of the requirements infeasible.

<u>Practical challenges may be the result of the building site location, limited rooftop availability, or shading from nearby structures, topography or vegetation. The applicant is responsible for demonstrating requirement infeasibility when applying for an exception.</u>

Exception 2 to Section 120.10: The Development Services Director or their designee may waive or reduce, by the maximum extent necessary, the provisions of this Section if the Development Services Director or their designee determines the building has satisfied the purpose and intent of this provision through the use of alternate on-site renewable generation systems, such as wind energy systems.

Exception 3 to Section 120.10: Greenhouse structures used for commercial cultivation, educational purposes, or the conservancy of plants or animals are exempted from the requirements of Section 120.10. The Development Services Director or their designee may exempt other greenhouse structure uses on a case-by-case basis.

Exception 4 to Section 120.10: If offered by local utility provider, new nonresidential including the nonresidential portions of mixed use construction, high-rise residential, and hotel/motel buildings, and alterations thereto having a building permit of at least \$1,000,000 and affecting at least 75 percent of the existing floor area, or additions that increase roof size by at least 1,000 square feet, may instead comply with Section 120.10 by submitting proof to the Development Services Director or their designee that each electrical meter related to the new construction, alteration, or addition is served by a local utility provider's renewable energy portfolio program that provides the greatest available percentage of electrical power from renewable energy sources. Proof of enrollment shall be maintained and documented through utility billings. If required, applicant shall consent to disclosure of tariff documentation to the Development Services Director or their designee for verification as authorized under California Public Utilities Code § 8380 (b). Applicant consent and disclosure shall be limited to Development Services Director or their designee accessing tariff information for verification purposes only.

Exception 5 to Section 120.10: An applicant may install a ground-mounted solar PV system that meets the requirements of Section 120.10 as a voluntary alternative to installing rooftop solar PV. The ground-mounted solar photovoltaic system shall comply with all existing health and safety requirements and limitations in the City.

Exception 6 to Section 120.10: Permit valuation shall exclude valuations for aesthetic exterior alterations in determining the \$1,000,000 permit valuation for alterations to existing non-residential, high-rise residential, and hotel/motel buildings.

Note to Exception 6 to Section 120.10: Exclusion of aesthetic exterior alterations is intended to exclude façade alterations and other exterior alterations that do not affect internal floor space or are not otherwise required to comply with health and safety requirements.

- C. Section 150.2 of the California Energy Code is amended to add paragraph (d) as follows:
 - (d) The following requirements shall apply to the entire dwelling unit, not just the additional or altered portion. Where these requirements conflict with other energy code requirements, the stricter requirement shall prevail. All additions and alterations of residential buildings with a building permit valuation of \$50,000 or higher shall include one of the following energy efficiency measures:
 - 1. Additions and alterations of single family residential buildings built before 1978 shall include one of the following:
 - A. Duct sealing pursuant to 2019 Title 24 Section 150.2(b)1E without verification by a Home Energy Rating System (HERS) rater. All exceptions as stated in 2019 Title 24 Section 150.2(b)1E are allowed. Projects that require duct sealing as part of an HVAC alteration or replacement must meet all of the requirements of Title 24, Part 6, including HERS rater verification.
 - B. Cool roof with an aged solar reflectance of greater than or equal to 0.25 and a thermal emittance of greater than or equal to 0.75. All exceptions as stated in 2019 Title 24 Section 150.2(b)1li for steep slope roofs and 150.2(b)1lii for low slope roofs are allowed. Only areas of roof that are to be re-roofed are subject to the cool roof upgrade. Projects that are not installing a new roof as part of the scope are exempt from this cool roof energy efficiency measure.
 - 2. Additions and alterations of single family residential buildings built in 1978 or after shall include one of the following:
 - A. A lighting package consisting of:
 - i. replacement all interior and exterior screw-in (A-base) incandescent and halogen lamps with screw-in LED lamps; and,
 - ii. installation of manual-on automatic-off vacancy sensors that meet Title 24 Section 110.9(b)4 in all bathrooms, bedrooms, offices, laundry rooms, utility rooms, and garages. Spaces which already include vacancy sensors, motions sensors, or dimmers do not need to install new Title 24 Section 110.9(b)4 sensors.
 - B. A water heating package consisting of:
 - i. addition of exterior insulation meeting a minimum of R-6 to storage water heaters 20 gallons or larger in size, except if insulation installation would void the water heater warranty; and,
 - ii. <u>insulation of all accessible hot water pipes with pipe insulation with R-3 pipe insulation. This includes insulating the supply pipe leaving the water heater, piping to faucets underneath sinks, and accessible pipes in attic spaces and crawlspaces; and,</u>

- iii. upgrading of fitting in sinks and showers to meet current CALGreen (Title 24, Part 11 of the California Building Code) standards, except for fixtures with rated flow rates no more than 10 percent greater than current CALGreen standards.
- 3. Additions and alterations of multi-family residential buildings built before 1978 shall include attic insulation with a minimum of R-38 rating. Buildings without vented attic spaces and buildings with existing attic insulation levels greater than R-5 are exempt from this attic insulation energy efficiency measure.
- 4. Additions and alterations of multi-family residential buildings built between 1978 and 1990 shall include one of the following:
 - A. Duct sealing pursuant to 2019 Title 24 Section 150.2(b)1E without verification by a HERS rater. All exceptions as stated in 2019 Title 24 Section 150.2(b)1E are allowed. Projects that require duct sealing as part of an HVAC alteration or replacement must meet all of the requirements of Title 24, Part 6, including HERS rater verification.
 - B. Cool roof with an aged solar reflectance of greater than or equal to 0.25 and a thermal emittance of greater than or equal to 0.75. All exceptions as stated in 2019 Title 24 Section 150.2(b)1li for steep slope roofs and 150.2(b)1lii for low slope roofs are allowed. Only areas of roof that are to be re-roofed are subject to the cool roof upgrade. Projects that are not installing a new roof as part of the scope are exempt from this cool roof energy efficiency measure.
- 5. Additions and alterations of multi-family residential buildings built after 1991 shall include one of the following:
 - A. A lighting package consisting of:
 - i. <u>replacement all interior and exterior screw-in (A-base) incandescent and</u> halogen lamps with screw-in LED lamps; and,
 - ii. installation of manual-on automatic-off vacancy sensors that meet Title 24 Section 110.9(b)4 in all bathrooms, bedrooms, offices, laundry rooms, utility rooms, and garages. Spaces which already include vacancy sensors, motions sensors, or dimmers do not need to install new Title 24 Section 110.9(b)4 sensors.
 - B. A water heating package consisting of:
 - addition of exterior insulation meeting a minimum of R-6 to storage water heaters 20 gallons are larger in size, except for buildings with central water heating systems or if insulation installation would void the water heater warranty; and,
 - ii. <u>insulation of all accessible hot water pipes with pipe insulation with R-3 pipe insulation. This includes insulating the supply pipe leaving the water</u>

- heater, piping to faucets underneath sinks, and accessible pipes in attic spaces and crawlspaces; and,
- iii. upgrading of fittings in sinks and showers to meet current CALGreen standards, except for fixtures with rated flow rates no more than ten percent greater than current CALGreen standards.

Note: To the extent the provisions of Section 150.2(d) conflict with other provisions of the California Energy Code, then the most energy conserving provisions shall supersede and control.

Exception to Section 150.2(d): The requirement for inclusion of energy efficiency measures does not apply to residential buildings that receive a rating of seven (7) or higher on the U.S. Department of Energy's Home Energy Score rating system based upon an assessment by a Home Energy Score Certified Assessor, to the satisfaction of the Development Services Director or their designee.

23.12.110 Adoption of the 2019 California Green Building Standards Code, Part 11, Title 24 of the California Code of Regulations.

- A. There is adopted and incorporated by reference herein as the City's Green Building Code for the purpose of prescribing regulations in the City of Encinitas for enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices the 2019 California Green Building Standards Code, Part II, Title 24 of the California Code of Regulations, a portion of the 2019 California Buildings Standards Code, as defined in the California Health and Safety Code, Section 18901 et seq., and the California Green Building Standards Code, 2019 Edition. Except as otherwise provided by this section of the City of Encinitas Municipal Code, all construction of buildings shall be in conformance with the 2019 California Building Standards Code and any rules and regulations promulgated pursuant thereto, including the California Green Building Standards Code, 2019 Edition, published by the California Building Standards Commission.
- B. Section 4.304.2 is hereby added to the 2019 California Green Building Standards Code to read:
 - **4.304.2 Graywater systems.** Newly constructed single-family dwelling units shall be pre-plumbed for a graywater system permitted and constructed in accordance with Chapter 15 of the California Plumbing Code and including a stub-out in a convenient location for integration of the graywater system with landscape irrigation systems and accepting graywater from all sources permissible in conformance with the definition of graywater as per Section 14876 of the California Water Code.

Exception: A graywater system shall not be permitted where a qualified soils engineer determines in a written, stamped report, or a percolation test shows, that the absorption capacity of the soil at the project site is unable to accommodate the discharge of a graywater irrigation system.

- C. Section A4.106.8 is hereby added and amended to the 2019 California Green Building Standards Code to read:
 - **A4.106.8 Electric vehicle (EV) charging for new construction.** New construction shall comply with Sections A4.106.8.1 and A4.106.8.2 to facilitate the future installation and use of electric vehicle chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625.

Exceptions: On a case-by case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:

- 1. Where there is no commercial power supply.
- 2. Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or the developer by more than \$400.00 per dwelling unit.
- 3. Where there will be an impact to existing parking requirements for hotel, motel and nonresidential additions and alterations greater than 10,000 square feet.
- 4. Or other conditions as determined by the City.

A4.106.8.1 New one- and two-family dwellings and townhouse with attached private garages.

Tier 1. For each dwelling unit, a dedicated 208/240-volt branch circuit shall be installed in the raceway required by Section 4.106.4.1. The branch circuit and associated overcurrent protective device shall be rated to 40 amperes minimum. Other electrical components, including a receptacle or blank cover, related to this section shall be installed in accordance with the *California Electrical Code*.

A4.106.8.1.1 Identification. The service panel or subpanel circuit director shall identify the overcurrent protective device designated for future EV charging purposes as "EV READY" in accordance with the *California Electrical Code*. The receptacle or blank cover shall be identified as "EV READY".

A4.106.8.2 New multifamily dwellings. For any new multifamily dwelling, at least 15 percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging spaces (EV spaces). Each EV space shall be equipped with fully operational electric vehicle supply equipment (EVSE). Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

A4.106.8.1.2 Technical requirements. The EV spaces required by Section A4.106.8.2 shall be designed and constructed in accordance with Sections 4.106.4.2.1, 4.106.4.2.2, 4.106.4.2.3, 4.106.4.2.4, and 4.106.4.2.5.

- **4.106.8.3 Hotels and motels.** Construction shall comply with Section A4.106.8.3 to facilitate the installation of electric vehicle supply equipment (EVSE). When EVSE(s) is/are installed, it shall be in accordance with the California Building Code and the California Electrical Code and as follows:
 - **A.4.106.8.3.1** For any new hotel or motel, including non-residential portions of mixed use projects, at least eight percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging spaces (EV spaces). Each EV space shall be equipped with fully operational electric vehicle supply equipment (EVSE). Calculations for the required number of EV spaces shall be rounded up to the nearest whole number. Refer to Section 5.106.5.3 for design requirements.
 - **A.4.106.8.3.2** For any alteration or addition to a hotel or motel that requires a building permit with square footage larger than 10,000 square feet as determined by the City of Encinitas Building Division, at least eight percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging spaces (EV spaces). Each EV space shall be equipped with fully operational electric vehicle supply equipment (EVSE). Calculations for the required number of EV spaces shall be rounded up to the nearest whole number. Refer to Section 5.106.5.3 for design requirements.
- **A5.106.5.3 Electric vehicle (EV) charging for non-residential buildings.** Construction shall comply with Section A5.106.5.3.1 and A5.106.5.3.2 to facilitate the installation of electric vehicle supply equipment (EVSE). When EVSE(s) is/are installed, it shall be in accordance with the *California Building Code* and the *California Electrical Code* and as follows:
 - **A.5.106.5.3.1** For any new non-residential buildings, including non-residential portions of mixed-use projects, at least eight percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging spaces (EV spaces). Each EV space shall be equipped with fully operational electric vehicle supply equipment (EVSE). Calculations for the required number of EV spaces shall be rounded up to the nearest whole number. Refer to Section 5.106.5.3 for design requirements. Refer to Section 5.106.5.3 for design requirements.
 - **A.5.106.5.3.2** For any non-residential alteration or addition that requires a building permit with square footage larger than 10,000 sq. ft. as determined by the City of Encinitas Building Division, at least eight percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging spaces (EV spaces). Each EV space shall be equipped with fully operational electric vehicle supply equipment (EVSE). Calculations for the required number of EV spaces shall be rounded up to the nearest whole number. Refer to Section 5.106.5.3 for design requirements. Refer to Section 5.106.5.3 for design requirements.
- D. <u>California Sections A5.201, A5.202, Subsections A5.203.1.1 (Tier 1 Prerequisites)</u> through A5.203.1.2.1 Tier 1, and Sections A5.211 through A5.213 are mandatory requirements for construction of all new nonresidential construction including

nonresidential portions of mixed use construction, high rise residential, hotels/motels, and alterations thereto having a building permit valuation of at least \$200,000 or additions of at least 1,000 square feet. These sections are hereby added and amended to the 2019 California Green Building Standards Code to read:

Section A5.203 PERFORMANCE APPROACH

A5.203.1 Energy efficiency. Nonresidential including the nonresidential portions of mixed-use construction, high-rise residential and hotel/motel buildings that include lighting and/or mechanical systems shall comply with Sections A5.203.1.1 and A5.203.1.2. Newly constructed buildings, alterations having a building permit valuation of at least \$200,000, or additions of at least 1,000 square feet are included in the scope of these sections. Buildings permitted without lighting or mechanical systems shall comply with Section A5.203.1.1 but are not required to comply with Sections A5.203.1.2.

A5.203.1 Tier 1 prerequisites. To comply with Tier 1, ONE of the following efficiency measures is required for all applicable components of the building project.

A5.203.1.1 Outdoor Lighting. Newly installed outdoor lighting power shall be no greater than 90 percent of the Allowed Outdoor Lighting Power, and general hardscape lighting within the scope of Title 24, Part 6, Section 140.7(b)(1) shall have a color temperature no higher than 3000K. The Allowed Outdoor Lighting Power calculation is specified in Title 24, Part 6, Section 140.7 Requirements for Outdoor Lighting.

Exception: The color temperature requirement is not applicable to the applications identified in the exceptions to Section 140.7(a) nor to the applications identified as "specific applications" in Section 140.7(b)(2) and Table 140.7.

A5.203.1.1.2 Service water heating in restaurants. Newly constructed restaurants shall comply with California Energy Code Section 140.5.

A5.203.1.1.3 Warehouse dock seal doors. Exterior loading dock doors that are adjacent to conditioned or indirectly conditioned spaces shall have dock seals or dock shelters installed at the time of permitting. This requirement shall apply to newly constructed buildings and to loading dock doors added to existing buildings.

A5.203.1.1.4 Daylight Design Power Adjustment Factors (PAFs). Daylighting devices shall be installed as specified in Title 24, Part 6, Section 140.3(d).

A5.203.1.2 Performance standard. Comply with the advanced efficiency levels indicated below.

A5.203.1.2.1 Tier 1. Buildings complying with the first level of advanced energy efficiency shall have an Energy Budget that is no greater than indicated below, depending on the type of energy systems included in the building project. If the newly constructed building, new addition, or alteration to an existing building

does not include indoor lighting or mechanical systems, then no additional performance requirements above Title 24, Part 6 are required.

- 1. For nonresidential building projects that include indoor lighting or mechanical systems, but not both: No greater than 95 percent of the Title 24, Part 6, Energy Budget for the Standard Design Building as calculated by compliance software certified by the Energy Commission.
- 2. For nonresidential building projects that include indoor lighting and mechanical systems: No greater than 90 percent of the Title 24, Part 6, Energy Budget for the Standard Design Building as calculated by compliance software certified by the Energy Commission.
- 3. For high-rise residential and hotel/motel building projects: No Greater than 95 percent of the Title 24, Part 6, Energy Budget for the Standards Design Building as calculated by compliance software certified by the Energy Commission.

Note: For Energy Budget calculations, high-rise residential and hotel/motel buildings are considered nonresidential buildings.

SECTION A5.211 RENEWABLE ENERGY

A5.211.1 On-site renewable energy. Use on-site renewable energy sources such as solar, wind, geothermal, low-impact hydro, biomass and bio-gas for at least 1 percent of the electric power calculated as the product of the building service voltage and the amperage specified by the electrical service overcurrent protection device rating or 1kW, (whichever is greater), in addition to the electrical demand required to meet 1 percent of the natural gas and propane use. The building project's electrical service overcurrent protection device rating shall be calculated in accordance with the California Electrical Code. Natural gas or propane use is calculated in accordance with California Plumbing Code.

A5.211.1.1 Documentation Using a calculation method approved by the California Energy Commission, calculated the renewable onsite energy system to meet the requirements of A5.211.1, expressed in kW. Factor in net-metering, if offered by the local utility, on an annual basis.

A5.211.3 Green power. If offered by local utility provider, participate in a renewable energy portfolio program that provides a minimum of 75-percent electrical power from renewable energy sources. Maintain documentation through the utility billings.

Exceptions to A5.211.1, A5.211.1.1, and A5.211.3: All new nonresidential including the nonresidential portions of mixed use construction, high-rise residential, and hotel/motel buildings, and alterations thereto having a building permit of at least \$1,000,000 and affecting at least 75 percent of the existing floor area, or alterations that increase roof size by at least 2,000 square feet, shall instead comply with California Energy Code Section 120.10.

<u>Exception 2 to A5.211.1, A5.211.1.1, and A5.211.3:</u> The Development Services <u>Director or their designee may waive or reduce, by the maximum extent</u> necessary, the provision of this Section if the Development Services Director or

their designee determines there are sufficient practical challenges to make satisfaction of the requirements infeasible. Practical challenges may be the result of the building site location, limited rooftop availability, shading from nearby structures, topography or vegetation, or unavailability of a local renewable energy portfolio program. The applicant is responsible for demonstrating requirement infeasibility when applying for an exception.

SECTION A5.212 ELEVATORS, ESCALATORS AND OTHER EQUIPMENT

A5.212.1 Elevators and escalators. In buildings with more than one elevator or two escalators, provide systems and controls to reduce the energy demand of elevators and escalators as follows. Document systems operation and controls in the project specifications and commissioning plan.

A5.212.1.1 Elevators. Traction elevators shall have a regenerative drive system that feeds electrical power back into the building grid when the elevator is in motion.

A5.212.1.1.1 Car lights and fan. A parked elevator shall turn off its car lights and fan automatically until the elevator is called for use.

A5.212.1.2 Escalators. An escalator shall have a VVVF motor drive system that is fully regenerative when the escalator is in motion.

A5.212.1.4 Controls. Controls that reduce energy demand shall meet requirements of CCR, Title 8, Chapter 4, Subchapter 6 and shall not interrupt emergency operations for elevators required in CCR, Title 24, Part 2, California Building Code.

<u>SECTION A5.213</u> ENERGY EFFICIENT STEEL FRAMING

A5.213.1 Steel framing. Design steel framing for maximum energy efficiency. Techniques for avoiding thermal bridging in the envelope include:

- 1. Exterior rigid insulation;
- 2. <u>Punching large holes in the stud web without affecting the structural integrity of the stud;</u>
- 3. Spacing the stude as far as possible while maintaining the structural integrity of the structure; and
- 4. <u>Detailed design of intersections of wall openings and building intersections of floors,</u> walls and roofs.

SECTION THREE SEVERABILITY.

If any section, subsection, sentence, clause, phrase or word of this Ordinance is for any reason held to be invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed and adopted this Ordinance, and each and all provisions hereof, irrespective of the fact that one or more provisions may be declared invalid.

SECTION FOUR: PUBLIC NOTICE AND EFFECTIVE DATE.

The City Clerk is directed to prepare and have published a summary of the Ordinance no less than five days prior to consideration of its adoption, and again within 15 days following adoption, indicating the votes cast.
This ordinance shall take effect and be in force on, 2021 and the City Clerk of City of Encinitas is hereby authorized to use summary publication procedures pursuant to Government Code Section 26933 utilizing the Coast News, a newspaper of general circulation published in the City of Encinitas.
SECTION FIVE: INTRODUCTION.
This Ordinance was introduced on, 2021.
PASSED AND ADOPTED this day of, 2021, by the following vote to wit:
AYES: NAYS: ABSTAIN: ABSENT:
Catherine S. Blakespear, Mayor
ATTESTATION AND CERTIFICATION: City of Encinitas
I hereby certify that this is a true and correct copy of Ordinance No. 2020-04 which has been published pursuant to law.
Kathy Hollywood, City Clerk